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# THE **TORQUE-TUBE**

THE NEWS PUBLICATION FOR MEMBERS

OF THE 1937-1938 BUICK CLUB • FOUNDED 1980



**Volume IX • Number 9**



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Volume IX, Number 9

July 1991

William E. Olson, Editor • 842 Mission Hills Lane, Columbus, Ohio 43235



## *Miscellaneous Matter*



### MEMBERSHIP RENEWAL TIME

Those of you whose memberships expire as of August 31, 1991 should already have received a renewal notice. If you haven't, it will be in your mailbox very soon. Please get your payment in as soon as possible; this makes things much easier for me. The dues will be the same as last year. Even though we will have more money in the bank after this issue is mailed than I expected at this time last year, this surplus would likely translate into about \$2.00 per member at most, and I decided it is better to ensure the Club's continued solvency than to save people \$2.00 per year. In any event, there seems to be at least a possibility that postal rates will be increased again. Almost by chance, I discovered that the increase of last February was put into effect only temporarily, over the objection of the Postal Rate Commission, which considered it too small. I am not at all sure how the process works, but it appears that another increase could occur during the next 12 months, and it seems prudent to be prepared for that.

Whether or not your membership expires this year, you will receive a Roster Information Form. Please fill this out and return it as soon as you can. The 1992 Roster will be based on the information contained in these forms, and if I do not have a current form from you, you may be listed incorrectly in the Roster, or not at all.

IF YOUR MEMBERSHIP EXPIRES ON AUGUST 31, YOU  
WILL NOT RECEIVE ANOTHER ISSUE UNTIL YOU PAY  
UP.

WHETHER YOUR MEMBERSHIP EXPIRES OR NOT,  
PLEASE FILL OUT THE INFO FORM AND RETURN IT  
PROMPTLY.

This administrative stuff is what I like least about running the Club. Let's get it over with quickly.



**FOUNDED BY DAVE LEWIS**



## BCA MEETS

Here are some award-winners at recent Buick Club of America events. Congratulations to all (including myself).

### BCA National Meet, Sacramento, CA

2nd Place (Class C) - Landy Brakke (#455), '37 81; Chuck Van Koten (#388), '37 80-C. 3rd Place - Ken Schmidt (#736), '37 41; Bill and Karren Schaeffer (#622), '37 67.

### BCA Great Lakes Regional Meet, Indianapolis, IN

1st Place (Class C) - Bill Olson (#427), '37 81. 2nd Place - Jesse Cahue (#719), '38 48. 3rd Place - Dale Crist (#840), '38 41.

As most of you probably know, the BCA National Meet judging is "formal", using a 400-point format patterned after AACCA judging, but with greater emphasis on authenticity. All judging seems necessarily to be more-or-less controversial, and the BCA 400-point system plus the various "rules" that go with it, is clearly no exception. I again served as Deputy Chief Judge for Class C at the BCA National, as I did for the two preceding Nationals, and observed the judging team and the cars as carefully as I could. The Class C team, led by Bob Hamro (#775), went about its work conscientiously and with a strong effort to be fair and consistent. No car presented for judging in Class C at this year's National was, in my estimation, less than very good, and most of them could have taken firsts against a field with fewer outstanding cars or under a different set of rules. The BCA's emphasis on authenticity or "correctness" goes a long way toward explaining the results. The first-place car in Class C, a Century convertible owned by a Californian named Plough (not a Club member) was, in my opinion, no better restored or maintained than the Brakke or Van Koten cars, but virtually everything in it was "correct". A few non-authentic features cost Landy and Chuck enough points so that each missed coming within five points of the Plough car. Both would have taken firsts at an AACCA meet, or if Mr. Plough had left his car at home, and the third-place winners might well have also. Is all this "fair"? That is a question about which reasonable men may differ -and probably will go on differing until the Sounding of the Last Trumpet — but no one need feel ashamed of his efforts, and that includes the non-placers as well.

The BCA Great Lakes Meet used "peer judging" which, it was hoped, would result in a less-stressful competition. As far as the pre-War cars were concerned, I think this was the case: everyone washed his, and probably did a little touch-up here and there, but I saw none of the Morning Madness that gets people out on the field at the crack of dawn on Saturday. (That was apparently not the case with the '50s and '60s owners, however, as a bleary-eyed look out my hotel window at 7:00 AM revealed dozens of them already hard at work, and later inquiry indicated that at least some had been so engaged since before sunrise. Perhaps at the next event I will set up a portable generator and coffee urn on the show field for these dedicated souls and make myself some money — if I can get out of bed at 5:00 AM too.)

Before leaving the subject of BCA meets for now, I should mention that Tomas Steuer (#713) made a round-trip of perhaps 8,000 miles from Bogota, Colombia to attend the BCA National. I need hardly add that the trip was not made by car, although Tom does in fact own a number of cars, probably in the dozens. These include not only a '38 Special convertible, but also, inter alia, several Citroens and a beautiful 1950s Allard that I would not mind having.

## 1992 PAN-PACIFIC RALLY

I've always wanted to visit New Zealand, but I daresay it will be quite some time before I do — at least, I will need to get my children off the Parental Payroll first. I've always thought February to be the gloomiest and most boring month of the year in North America, its sole virtue consisting of having fewer days than all other months. If you're like me, but have more funds at your disposal than I have, the Second Pan-Pacific Rally, to be held in New Zealand February 10-24, 1992, might be just what you've been looking for. This event, sponsored by the Vintage Car Club of New Zealand and British Petroleum, apparently includes vintage car "rallies", steam-powered railroad excursions, and numerous other attractions. No need to ship your car to New Zealand: members of the New Zealand antique-car fraternity are prepared to loan vehicles to visitors from overseas. For those who like tours, this could be the Big Event of Your Life! All my observations indicate that New Zealanders are engaging and hospitable fellows, and they speak English — or a form of it — understandable to "Yanks" in the main, if not in all of its vernacular elaborations. Once you've mastered "petrol", "tyres", some Maori place-names, and driving on the left, there should be no difficulty at all. If you are thinking, "why February?" remember that's summer south of the Equator.

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011-64-9-473-6856

(New Zealand time is seven hours earlier than Eastern Standard time, if you're thinking of telephoning.)



*COVERS*



FRONT COVER: It seemed to me about time I put my own car on a cover, and here it is in front of the magnificent early 19th century barn at Garth's Auctions in Delaware, Ohio, during the Eastern Club Meet. A report of the Meet appears in this issue. (All Eastern Club Meet photos are by John Huffman (#623).)

BACK COVER: A 1938 Century convertible from a fleet of Buicks used by the National Police of Denmark prior to World War II. See the article by Erik Bjerring in this issue.



# EASTERN CLUB MEET

## june 27 ~ 30

The Eastern Club Meet, held in Columbus June 27-30, was a great success. At one point I was close to cancelling the whole affair, because of an apparent lack of interest, but in the end we mustered 13 '37 or '38 Buicks and something over 40 people. I'm sorry more of you did not come, but in truth that is about the ideal size for an event in which (a) everyone can get to know everyone else, and (b) one or two persons (in this case my wife Mary and me) can effectively manage things. There were a few last minute "drop-outs" but these were balanced by a few last minute "show-ups."

Highlights of the Meet included:

- (1) A little tour up a beautiful stretch of road to Garth's Auctions in Delaware, Ohio where we were treated to an explanation of proprietor Tom Porter's antiques auction business, an inspection of the magnificent circa-1820 barn that has become his trademark, and an opportunity for some great photos of our cars.
- (2) A visit to the car collection assembled by Columbus auto dealer Len Immke,



Disembarking at Garth's Auctions on the Eastern Club Meet tour. Two '37 Roadmasters owned by Clint Preslan (#461) and the Editor are shown in the left and right foreground, respectively.



Editor's '37 Roadmaster (damn nice-lookin' car, isn't it, folks?) is shown at the south side of Garth's "big barn" which was erected circa 1820. (The smaller wood structures are later additions.) The larger-than-life dog statue, which Mr. Porter found somewhere on his travels and had restored, is made of what we would call "pot metal" -- a copper-and-lead or zinc-and-lead alloy -- and is a conversation piece to end all conversation pieces.

Jr. To say Mr. Immke's collection — which is more in the nature of a private museum — is impressive is like saying that the Grand Canyon is impressive: a slight understatement. It is awesome. Fortunately, no one fell on the \$2 million Immke Ferrari — or anything else. A few of us found a couple of little deficiencies in his '38 Century convertible, but that was overshadowed by the opportunity to drool over, inter alia, two Bugattis, a LeMans Frazer-Nash, several beautiful '41 Caddys, a '53 Eldorado, numerous Buicks of several vintages, and many others too numerous to describe: perhaps 100 cars in all, each beautifully restored and maintained. Mr. Immke is very selective as to who he lets in, and we were privileged to be among those given the chance to see them.

(3) An interesting — and I hope educational — car judging seminar conducted by AACCA Master Judge John Huffman (#623), who told his students how to win, or if one wants to look at it that way, how to lose. I offered up my own '37 model 81 for John to use in a demonstration of nit-picking, in part to see if he'd find all the things I knew were incorrect. John missed only one: the odometer wheels are the wrong color. (That is picky.)

(4) A great buffet-style banquet, featuring more finger-lickin' goodies than we could all eat. During the "happy hour" preceding this event, it was discovered that Al Pavlik (#62) is a terrific piano player, and the hotel staff obligingly wheeled a piano into the banquet room for him to play.

There was only one case of car trouble: Clarence Hoffman's (#546) '38 Special

"phaeton" developed rear axle bearing difficulties. This is not a problem to be fixed in a parking lot. Fortunately, David Bylsma (#117) and his father had trailered David's car from Maryland, and they agreed to trailer Clarence's car back to Cleveland and drive David's that far on their way home. I came very close to having my own trouble. My original fuel pump had been pumping oil out of the engine. This was replaced on Thursday with a spare pump, but that leaked. The first pump was put back on, but then failed altogether. Fortunately, I was able to borrow a third pump from John Huffman, (#623), who was attending the Meet, and that was put on at 8:00 AM on Friday. That one worked fine, and I was thus able to demonstrate to some skeptical members that yes, I really do have a '37 Roadmaster.

Several people drove long distances in '37 or '38 Buicks: Lee Johansson (#825) and Jim Terruso (#816) from the Boston area in Lee's '38 Special; Dave Wettersten (#887) from Minnesota in his very nearly original '38 Special; the McLaughlins (#466) in their '37 business coupe from northern Michigan; John and Mary Dieterly (#768) from Philadelphia in their '38 Special; and Al and Joan Anderson (#723) from New Jersey in their '37 Century. Curiously, out of 28 members in Ohio, only seven showed up. Michigan is usually well-represented, but conflicting events held the number of cars this time to one.

We already have some thoughts about next year's event, and a few people looking into some possibilities.

Dave Wettersten's note, which I received a week later, was typical of the comments: "The meet was thoroughly enjoyable," Dave said, "and it was great to be able to meet and talk to other members of the Club. I look forward to next year." Dave points out a virtue of Club events that is not sufficiently appreciated: the opportunity to talk and exchange information on a face-to-face basis. This can be very helpful. Besides



Steve King (#776) and his '37 Special in front of the "big barn". The long sides of the barn have wood siding above the lower story, and the second level here overhangs the lower by several feet. This permitted the animals to be given air in inclement weather. The opposite side of the barn is "banked" to give wagon access to the threshing floor and grain-storage areas on the second level.

having a good time, many people have gone home from our meets with important new knowledge. Looking carefully at a variety of cars can also be a useful exercise, and in this case Dave's own '38, which appears to be almost completely original except for an old re-paint, was quite instructive. Except for one flat tire, Dave had no trouble with his Special on a 1400-plus-mile round trip from Minneapolis to Columbus and back. "We made the trip home in one day with no problems," Dave wrote. "What a car! I'm still trying to get all the bugs out of the radiator, however."



### 1991 WEST COAST MEET

A more lengthy report on this will be in the next issue. Suffice it here to say that we had a terrific time, and that I thoroughly enjoyed meeting some of our California members for the first time. I was also pleasantly surprised to find, as participants, Jose Pardo and his wife, who had journeyed all the way from Cali, Colombia to join us, and whom I had previously met at our Flint meet in 1987. The Pardos continued on from California to the big aircraft show at Oshkosh, Wisconsin. Cecil Don (#637) and Carl Dahl (#868) and their wives organized a great tour, on which, so far as I am concerned, we proved that 1937 and 1938 Buicks can be driven damn near anywhere — except maybe over Beartooth Pass in the middle of winter. In addition to the Dons and the Dahls, special thanks are also due to Chuck Van Koten (#388) and his wife, who hosted a picnic at their beautiful home in the Napa Valley. I am hoping to have some photos of all of this ready for the next issue.



### CARS FOR SALE



1937 Roadmaster convertible sedan, model 80-C. Major project car. Has sidemounts with covers, good cowl, top bows & pillar support assemblies, doors, original frame, more. No running gear or wheels. Needs floor, wood, more. Plus Roadmaster sedan parts car, rolling, with engine, trans., sidemounts, many good parts. \$4350 for all. DAVID POWERS (#894). 27732 Paseo Barona, SAN Juan Capistrano, CA 92675. 714/493-1199.

1937 Century 2-door sedan, model 68. Less than 250 of this model made. Manuals & most options. Engine & drive train done by BOB Pipkin. \$10,995. Brent & Davis, 341 Grove, Drive, Portola Valley, CA 94028. 415/941-5890 or 851-1155.



# From Out of the Past: Buicks in European Service



## CANADIAN BUICKS IN NORTHERN IRELAND

The accompanying photograph shows a fleet of 1938 McLaughlin-Buick Limiteds at the offices of the Wilton Undertaking and Limousine Service in Belfast, Northern Ireland. According to an article by Jim Kee, Jr. that appeared in the McLaughlin-Buick Club of Canada's publication The Accelerator around 1976, all of these "Ulster" Buicks were originally English-registered cars and were purchased by Wilton in the early 1950s and shipped from London to Belfast. Included were 12 1938 Limiteds, three 1939 Limiteds, and three 1938 Buicks (probably Limiteds also) fitted with special hearse or ambulance bodies. Two of the latter may be seen at the extreme right in the photograph, and you will note that they have a single-pane glass window extending from the front door to the rear, which appears to be squared off in the manner of a panel delivery truck. The hearses are also fitted with roof racks. (Although a number of elaborate hearse bodies with "carved" side panels appeared on Buicks — and other makes — in the 1930s, many cars built for funeral establishments were designed for transporting more than caskets, and the hearse often doubled as an ambulance or flower car. One supposes this led to jokes about the undertakers getting people both coming and going, and did not improve the mental outlook of the sick or injured thus transported.)

Mr. Kee's article says that many of the '38s were used by the Wilton firm for twenty years, before being retired in the early 1970s. Some were then shipped back to England. As of the time of the Accelerator article, Mr. Kee owned one of them, a 90-L with gray mohair upholstery in back and leather in the chauffeur's compartment.

While in the Wilton fleet, the cars were driven only by the firm's chauffeurs, and expertly maintained by a group of skilled mechanics. Every 12 months they were subjected to a thorough government "public service vehicle" inspection not required of cars owned by individuals for their own use. There is a story that one of the cars failed an inspection because it had a new tire on one of its sidemount spares and a worn tire on the other. The inspectors maintained that both should be in equally good condition. Wilton's argued that no modern car had more than one spare, so why penalize the Buick for having two? After considerable discussion, the authorities conceded the logic of that position and the Buick was approved.

Our thanks to The McLaughlin-Buick Club of Canada, and former Accelerator editor Robert Ward (#114), for sharing this very interesting material.



1938 McLaughlin-Buick Limited owned by Jim Kee, Jr. of Belfast, Northern Ireland, is shown on the grounds of Belfast Castle in a photo made in the 1970s.





## POLICE BUICKS IN DENMARK

By Erik Bjerring (#654) - Helsingør, Denmark

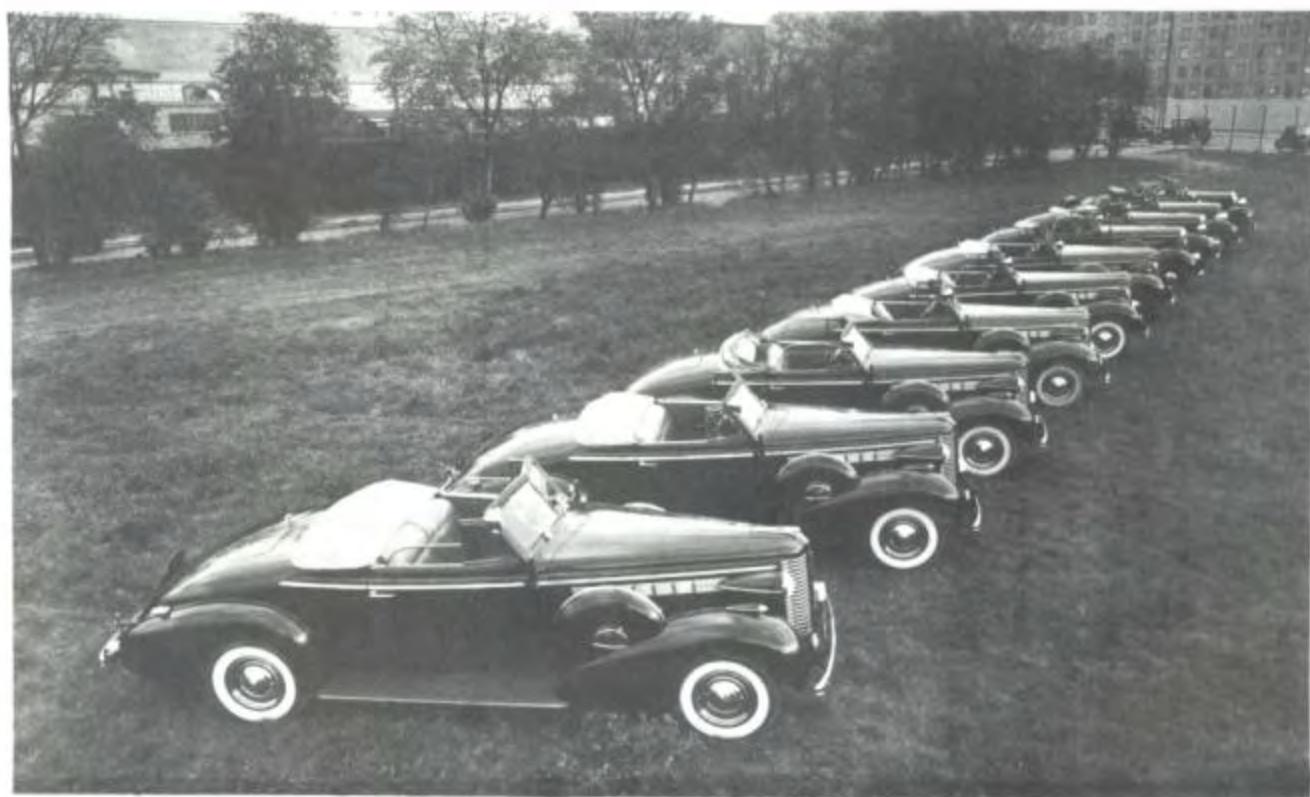
Perhaps a little Buick material from far away would be of interest to fellow Club members. The photographs that accompany this article were taken before World War II (in 1939 I should think), and portray the Danish "National Traffic Police." This organization was something like federal police or perhaps a state highway patrol in the U.S.A.; that is, these guys were covering all of Denmark's main roads, and had jurisdiction all over the country, as opposed to local police forces which could only bust the traffic offender in their own cities or towns.

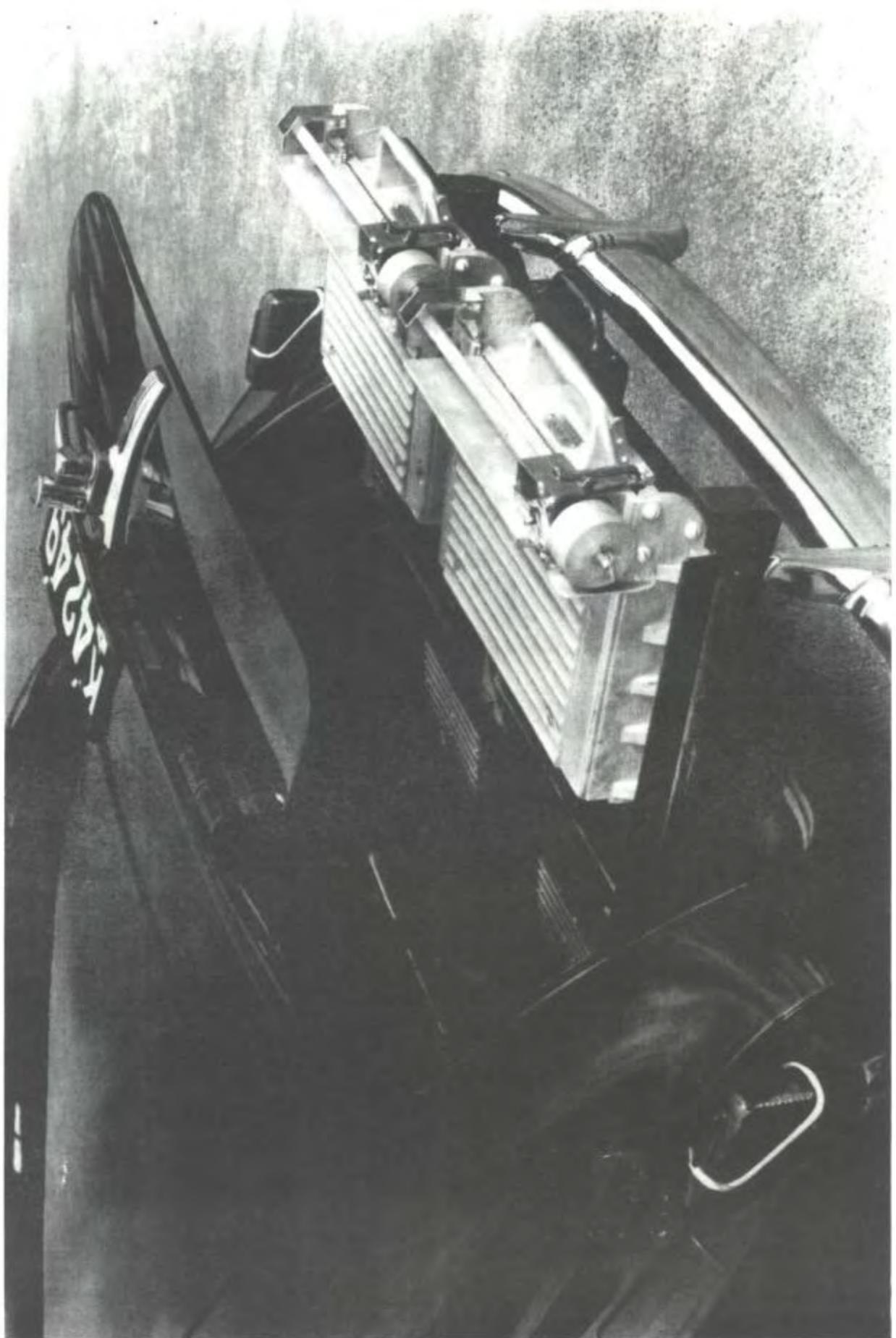
Needless to say, members of the National Police were the envy of all boys like myself when we saw them in their gleaming Buicks. Although everybody knew them by sight, they nevertheless drove around with their convertible tops down and in civilian clothes, hoping not to be recognized. As soon as some stupid "speeder" came close, on came the police cap and the green lights you see above the front bumpers in the photos. The poor victim could expect a fiscal "greeting" from the authorities soon after.

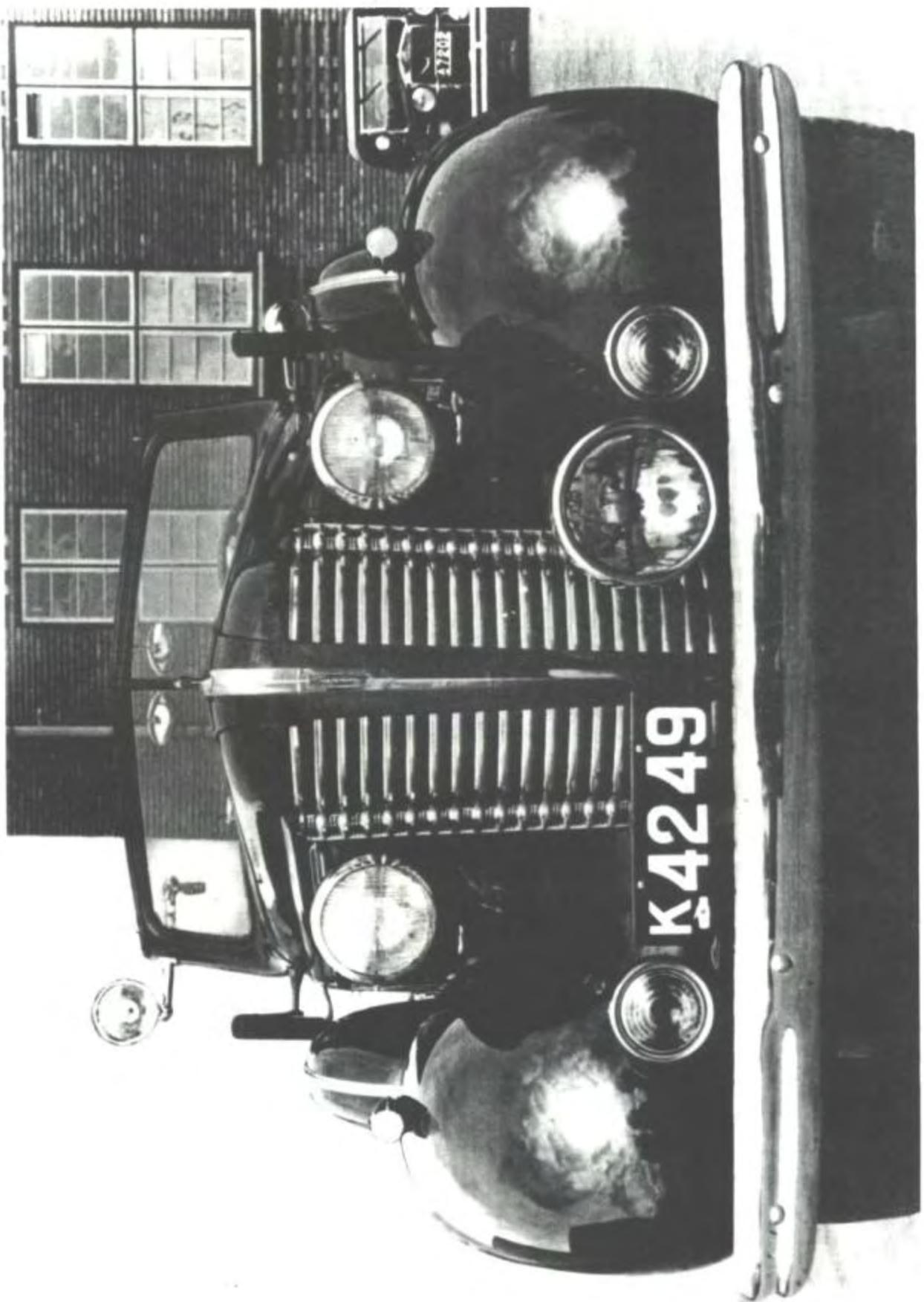
In addition to the green lights and large driving lamp in front, one should note the double rear-view mirrors, spotlight, and European-style turn signals (the rectangular vertical boxes mounted on each side of the car, out of which popped lighted arrows). The contraption you see fitted into the rear deck in one photo is, believe it or not, a pair of scales, with which it could be immediately determined whether a truck stopped by the police was overweight. I guess in those days trucks weighed only a fraction of today's monsters.

The factory you can see in the background of some photos is General Motors' first international assembly plant overseas, established in 1923. I have just retired from

it after 22 years' employment. A lot of Buicks have been put together in that plant, but I doubt that the open police Centuries were among them. Those were probably exported fully built-up from the U.S.A.



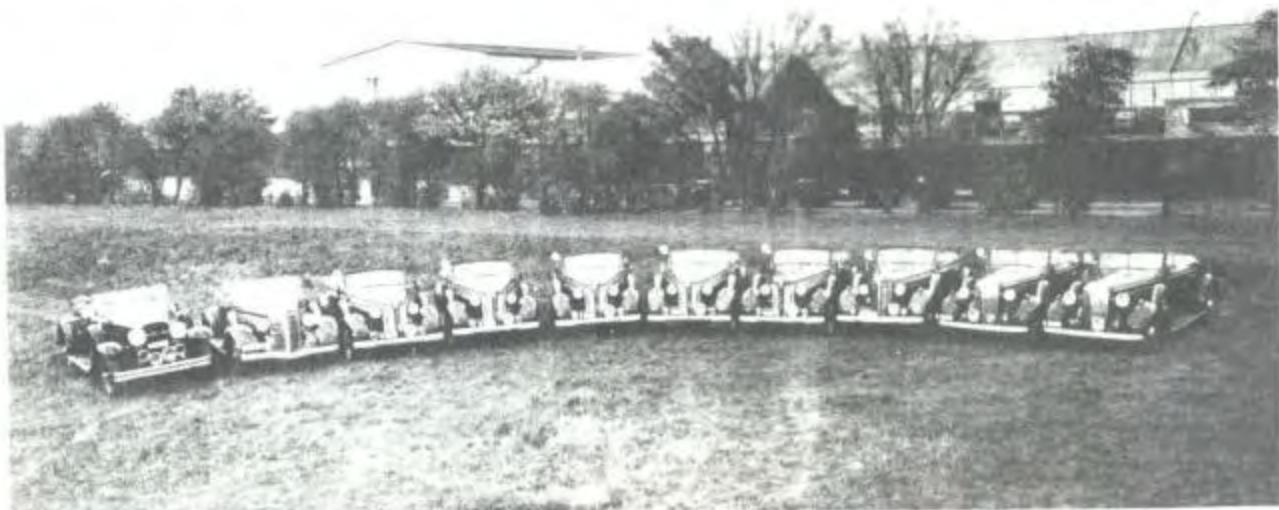




EDITOR'S NOTE: Tak skal du have (that's "thank you" in Danish) to Erik for an extremely interesting and rare set of photographs, and for his commentary. Although your typical U.S. police officer today is seen in a big four-door sedan (except in California where, I am told, the Highway Patrol has Mustangs), convertibles were used in the 1930s, both here and abroad. (I've seen pictures of a California Highway Patrol '37 60-C.) Perhaps it was thought that the enhanced visibility with the top down was a plus for police work. The Danish National Police plainly made an impressive show with their uniforms and fleet of Buicks. Why they chose the Buick over a European make must be a matter for speculation today, but it may well be that the Danes decided that Buick gave them the most power and speed for the least cost, as compared with, say, Mercedes-Benz or the like. The presence of the big GM assembly plant in Denmark may also have been an important factor. The array of cars shown in some of the pictures includes five '38s, one '37, two '36s (with European-style headlights), a '34 or '35, and what is probably a '31.

Erik Bjerring has been a member of the Club for several years, and has a '38 46-C which, he says, he "picked up two years ago in Maine and found through The Torque Tube", a '37 60-C, a '27 Buick and a Hudson. He's been to Hershey several times looking for parts.

Fortunately for both of us, Erik has a fine command of the English language, as do most Scandinavians today. In fact, his story received less editorial work than the average piece from an American member. English is not an easy language to learn, even though several centuries ago it got rid of the inflections and genders that plague the American student of European languages today. It is especially difficult to pronounce and spell: consider "move" and "shove", "flood" and "cook", "fowl" and "throw", and "foul" and "you", to cite just a few examples. Whatever its virtues and difficulties may be, English seems to have become something of an international language of commerce, and it is estimated that perhaps 400 million people can understand it today.





# An Engine Chronicle



• By the Editor •

As indicated several times in the past, when I purchased my 1937 Roadmaster in 1987 I thought I was getting a car whose restoration was virtually complete, including a rebuilt engine and drive train. That was true, but the corollary of it — that I would need spend little more time and money to have a nice-looking and reliably-performing car — was not. Yes, the engine had been rebuilt all right, but the people who did it — two owners back from me — ought to be set to doing nothing more complicated than picking tomatoes or sweeping the sidewalk. They were guilty of gross negligence.

I was always a little puzzled by the reports of other Roadmaster owners as to how smoothly and powerfully their cars performed. Mine never seemed to reach a level justifying the raves I heard from others. Perhaps, I thought, I am just harder to please. No so.

The evidence of screw-ups had already begun to surface when I drove the car from Columbus to Wheeling for the BCA Great Lakes Regional Meet in 1989; I had previously been obliged to replace the entire rear end and fix several other things. The 1989 trip was the first time I had driven the car at highway speeds for more than five or ten miles at a time. When I got over to Wheeling, I noticed that the car was blowing white smoke when first started up. That is almost always a sign of coolant leaking into one or more combustion chambers. When we got home, I found that the head had not been properly torqued. I hoped that re-torquing the head would solve the problem. It didn't, and at about the same time the engine began making funny noises. The car went over to the shop of my friend Ed Hunkins. At this point, I can probably do no better than repeat what I wrote at the time, and the following paragraphs are taken from Vol. VIII, No. 6, page 1.

\* \* \* \* \*

"If you have tears, prepare to shed them now."

That is what my friend Ed Hunkins might have said to me if he were a Shakespeare scholar and could quote Marc Antony's oration from Julius Caesar. Ed, who with his son Steve operates a small shop devoted to work on "special interest" cars, had just taken in my '37 Roadmaster to continue the work on it begun last year. (That included replacing the whole rear end, a story I related last spring.) Instead, Ed said: "I have some bad news for you." After hearing the news, I did not quote Shakespeare either, unless "shit, Shit, and SHIT!" can be found in some obscure corner of the Bard's work.

That timeless expletive was as good a response as any, I guess. Last summer, we had begun to notice some noises apparently coming from the bottom end of the engine. I decided we should have a look at the main and rod bearings. The bad news was that the engine rebuilder (two owners removed from me) had put the rods in backwards. Does this make a difference? Does a bear ...? Well, we know bears do, and it sure does. Primarily, it results in an incorrect flow of oil through the engine.

In the next issue (Vol. VIII, No. 7, pages 21 and 22) I continued the story.

\* \* \* \*

You may recall that last time I began telling you about this year's car trouble: my discovery that the person (or persons), two owners back from me, who "rebuilt" the engine in my '37 Roadmaster had put the rods in backwards. That was not, by a long shot, their only error.

The engine has now been removed from the Roadmaster and disassembled. Before tackling that, we took off the hood, the front bumper and brackets, the fenders and nose as a unit, the brace bars and the radiator. Its difficult or impossible to remove the engine without doing all of these preliminaries. A '37 hood must be stored carefully by supporting it on sawhorses in the approximate configuration it has when on the car in the closed position. The four-piece '37 hood is easily bent, and difficult to straighten, and the hinges are impossible to find. Taking the fenders and nose (sometimes called the "front clip") off as a unit will help greatly to preserve their alignment. As anyone knows who has tried to align hood, nose, grille and fenders, the job is an absolute certifiable bitch, and has driven many sane men into temporary insanity.

All of that done, and the removable items (fuel pump, generator, temperature and oil pressure senders, manifolds, etc., etc.) taken off or disconnected, the engine was hooked to a hoist, the mounts disconnected and the transmission disconnected from the clutch. The Manual advises removing engine, clutch and transmission all at once, disconnecting at the torque ball, but that makes a heavier package. The transmission will come out later, when new rubber supports are put in. For now it is supported on a length of 2 x 4 held to the frame with clamps.

In the last issue I reported that an inspection from the bottom end had revealed a serious error by the original rebuilder: the rods were put in backwards. After thinking about this problem for a week, and reflecting on the various other mistakes that had been made in restoring the car and already revealed, we decided to pull the engine. If a number of serious errors had already shown up, it was likely, we thought, that there were more to be found. Right we were.

After looking at the disassembled engine, I was appalled. Almost every mistake in engine rebuilding that can be made was in fact made by the people who rebuilt this engine. I use the word "mistake" in an effort to be charitable: gross negligence and stupidity are more accurate. Here is a partial list of the problems and conditions to be remedied.

1. A hairline crack in the head was not discovered. This leaked coolant into the engine causing sludge formation.
2. The timing chain had been installed wrong, and was so loose it actually scored the inside of the cover.
3. All the pistons were fitted with insufficient clearance, and all are scored.
4. The rods were so tight on the pins that a few could barely be moved by hand.
5. One cam bearing was put in skewed, and two cam bearings were installed so that the oil holes in the bearings did not align with the oil passages in the block.

6. As a result of (5) and of the rods being reversed, the cam lobes are badly worn and two of the bearing journals are worn, due to inadequate lubrication.

7. The rear main bearing was disintegrating, and the other mains are all scored. The rod bearings were bad and the crank journals scored. This is the result of failure to clean out grit and dirt after sandblasting the block and reboring the cylinders.

There's more, but that is a sufficiently depressing list for now. With this engine, I am at "square one" or "ground zero"; that is to say, it must be completely rebuilt all over again, just as though I had recently pulled the car out of a swamp, rather than bought a car I thought was finished and roadworthy.



\* \* \* \* \*

I doubt that the head was cracked before the trip to Wheeling, because the car never blew white smoke before that. My suspicion is that the drive over there with improperly torqued head caused enough uneven expansion and contraction to crack it. The cracking appeared only in one location, and the crack itself was no more than an inch or two in length; nevertheless, we were quoted a price of \$450 to fix it. This seemed like a lot of money to spend on work that, no matter how skillfully done, is somewhat chancy: one never really knows whether this kind of repair will hold up. I therefore undertook to find a good head, and fortunately was able to get one from fellow-member Rick Wilson (#539) who lives only 15 miles from me. I also obtained from Rick several good lifters. (These came out of a parts car Rick bought several years ago for its sidemount fenders.)

It was obvious that the engine would need new pistons and rings, new timing gears and chain, new or reconditioned lifters, two new valves, new rod bearings, new main bearings, and new cam bearings. (The intake and exhaust valves were burned at the location of the crack in the head.) It was also obvious that I would need to either find a decent cam shaft or somehow rehabilitate the one I had.

Before starting a search for parts, I considered the Big Decision that would determine and govern almost everything to come after: do I want to make it absolutely "stock" '37, or do I want to use the "invisible upgrades" that some engine rebuilders have done and written about?

Before moving on with that, I will pause here to say that long ago I learned the value of having people owe you a favor or two. That is one of the precepts of successful lobbying or dealing with government agencies: if you can extend yourself a bit to make, say, an Assistant Attorney General look good in the eyes of his boss, when you have a problem he may well be inclined to be reasonable about it. It also helps survivability in large organizations. Besides being interesting and fun, and providing your Editor an outlet for some of his more outrageous opinions, producing this publication has exactly the same virtue. The way I see things, each one of you owes me something, and it is indeed comforting to know that when I need help, there are some 400 potential sources to whom I can turn. That theory was tested in the course of my engine rebuild and found good. I called upon several fellow-members for advice and for parts, and each gave willingly and generously, for which, you may be sure, I am duly grateful.

I had already concluded that I did not want ever to pull the engine again, and that, while I did not wish to waste money, there would be no reasonable expense spared to do the job right once and for all. I sought the advice of several people on whether to "upgrade" the engine, if so, to what extent, and from what sources to obtain parts. This advice was far from consistent. I was told, for example, that later-year pistons would not work or would make the engine difficult or impossible to start, and that they would make a big improvement. I was told to buy everything from Egge and nothing from Terrill, and everything from Terrill and nothing from Egge. All of this was carefully sorted out, and in the end I followed the counsel of former member Bob Pipkin where there was conflict. So far, at least, all of Bob's advice has proven good.

I decided to go with '41-'49 style pistons, to convert the rods to insert bearings, and to buy as many new parts as possible from Terrill. I also decided to convert to a later-style timing chain cover if I could find one within a reasonable period of time, and not to try a conversion to hydraulic lifters if I could find a good '37 cam. (Converting to hydraulic lifters requires a 1950s straight-eight cam, lifters, push rods, and complete rocker-arm assembly. Looking for all of this would have compounded the parts search considerably, and the conversion gains mostly quieter running, not better performance.)

As things turned out, I was very fortunate in finding parts. In addition to the uncracked head and lifters I bought from Rick Wilson, from Bob Pipkin I was able to obtain a set of insert-bearing rods from a junked '49 Roadmaster he'd found somewhere in Idaho, a set of NOS ".030-under" rod bearings, and a good used cam. I knew that John Steed (#132) had (and still has) a '49 large-series engine for which he is — temporarily — lacking the matching '49 frame, running gear, and body. John gave me the timing chain cover therefrom upon my solemn promise to have another '49 cover in his hands as soon as he had a car to put the engine into. I figured that while I had plenty of time to find the cover, I'd better get busy on it nevertheless: as many of us know, things are getting scarcer and scarcer. John Huffman (#623) told me he had a friend who likely had such a cover, or several of them, and would likely give John one. Sure enough, John got the cover, gave it to me, and I duly gave it to John Steed, all within a month or two. That took a nagging burden off my mind: it would be a terrible thing, five years from now, to hear John Steed saying "Bill, old boy, remember that timing chain cover I gave you?" and then not be able to find one. I also knew that many years ago former member Hank Bates, then a travelling salesman, had, every time he came to a new town with a Buick dealer in it, bought up as much of the dealer's stock of "obsolete" parts as he could get out of town with. In the course of this, Hank amassed a fair stock of good '37 and '38 stuff. Three or four years ago, Hank went on to other pursuits, and offered to sell me the entire treasure. At the time, I had neither the room nor the money, but fortunately Randy Dozier (#561) had both, and he bought the whole Bates stash. Needing lifters, I called Randy, and sho' nuff, he had eight or so NOS lifters, which he was kind enough to give me. Those, together with those I'd bought from Rick Wilson and a few of mine, made a good set. (Most of mine were badly pitted and spalled, and it was obvious that the first rebuilder had given no thought to reconditioning them.)

It was obvious that the block had been bored once before. Although the pistons were scored from having been fitted too tight, the cylinder bores were not significantly damaged. Thus Ed and I decided we could stay with pistons of the same size, and achieve the necessary increase in clearance by honing the bores. This not only saved the expense of a second re-bore, but also eliminated a procedure in which a mistake by the machine shop could have been disastrous.

All the parts we needed that I had not already found were obtained from Terrill Machine in Texas. This included pistons, two valves, timing gears and chain, main bearings, and cam bearings. I obtained a Fel-Pro gasket set through a friend who is

an auto parts counter-man. (For Fel-Pro part numbers, see Issue 5, page 27.) In addition to the gaskets that come with the "full" or "overhaul" set, during the course of the work I bought at least one extra oil pan gasket, and probably a few others. That these gaskets are still obtainable for the straight-8 is remarkable, and they are excellent.

The work that Ed did not do was done either by Central Ohio Engine Rebuilders, Inc. or Columbus Col-Weld Corporation, both of Columbus, Ohio. Ed assigned this work based upon his prior experience with both firms and their respective lead-times. Some delay was experienced at Central Ohio because we got there at the same time as all the dirt-track guys who wanted the engines they blew up the year before, and because two employees picked that time to quit. The novelty of the work presented — one doesn't see a Buick straight-8 every day — was such that the "boss" at Central Ohio decided he'd better do it himself, especially since he was suddenly lacking two experienced machinists. (In addition, I think Ed told him something like this: "Look, the guy who owns this knows more about '37 Buicks than anyone in the world, he can be a mean SOB and he's already pissed off, so you better get it right." The first part of that was reinforced by a few Torque Tube excerpts that came along with the engine.)

Without going into too-minute detail, I will try to give you a section-by-section review of what was done.



Block. The block was sent out to be "boiled". Although it appeared that this had been done once before, I decided that it sure wouldn't hurt to do it again. "Boiling out" a block will destroy the cam bearings, but that was not a concern as they were to be replaced in any event. The cylinders had previously been bored .030. As indicated above, although the pistons were scored, there was no significant damage to the cylinder walls. It appears that the prior rebuilders had gone with a "factory spec" piston-cylinder clearance of .0018. Perhaps the best single piece of advice Bob Pipkin has given us is that, although this may have worked with Buick "factory" pistons years ago, it does not work with the "after-market" pistons available to us today, which all have a different design and a different rate of expansion. The experience of several members has proved Bob right. (See, e.g. Vol. VI, No. 8, page 15.) Ed therefore instructed Central Ohio to hone the cylinder walls to achieve a clearance of .004 — i.e. to remove .0022. Ed tells me that on other engines he has gone successfully to .005, but .004 should work well: anything much less than that asks for trouble. The block was carefully checked for cracks — fortunately, none were found. Ed cleaned the bores thoroughly after the engine was returned by Central Ohio. Although it appears that the machine shop had done that, one cannot be too cautious or conservative about this. Any metallic dust left from the honing operation can act as a harsh abrasive on the cylinder walls when the engine is run, and carelessness here can ruin an otherwise-good rebuild job.

Head. The "Wilson" head was reconditioned by Columbus Col-Weld at the same time the block was cleaned out and honed. We found that hardened valve seat inserts could be put into the head for \$10 a piece. While I have no great concern about the claims that valve seat recession will occur when unleaded gas is used, in this case complete safety came at a moderate price (\$160) in comparison to the cost of the entire job, and I had the hardened inserts installed. If you wish to, or must, adhere to a stricter

budget than I used, Ed and I agree that it is more important to have recession protection for the exhaust valve seats than for the intakes. Even in states where leaded gas is history, I would not pull the head off any engine just to have hardened seats put into it. If you are rebuilding, however, it makes sense to do it as the price is moderate and the peace of mind may be great. Ed also had the machine shop do something I've never heard of anyone else having done: taper the spark plug seats. As we have previously observed, there is a limited range of spark plugs that will fit the '37 head. These are all 18-mm truck plugs. (See Vol. VIII, No. 3, pp. 21 & 22.) The "standard" '37 plugs are AC C-86 or Champion D16, with AC C-87 and Champion UD16 and D18Y being "hotter" variations. Tapering the plug seats in the head permits use of a group of modern 18-mm Ford truck plugs, which do not use gaskets but rather have tapered shanks to match the tapered seats. This modification will permit us to experiment with plugs, perhaps literally for years, until we find one that performs best -- or decide it doesn't make much difference. The standard AC and Champion plugs can be used with the tapered seats as well as with the unmodified flat seats. When Ed was putting the engine together, I noticed that he used lock washers under the head bolts. This looked "odd" to me. His explanation was this: repeated removal or retorquing of the head can cause wear on the casting where the head bolts contact it. If the wear is too great it will be difficult to get an accurate torque reading on the bolts. Using lock washers prevents this.

Pistons. '37 pistons have flat tops. In '38, as we know, Buick introduced the new "Turbulator" piston that has a wedge on top. This design raised compression slightly (5.75:1 vs. 6.35:1 in the 320 engine) and was claimed to provide better combustion. ("Each spark sets off a tiny cyclone....") In 1941, piston design was changed again to provide for a smaller "wedge" and a "scooped-out" area on the spark plug side. For the large-series engine this piston design was used from 1941 through 1952. The '41-'52 (or '41-'49 for the 248 engine) piston, according to previous articles by Bob Pipkin, can be used successfully with the '37 head if the thick "sandwich-style" head gasket is used, and the result is about 15 more horsepower and improved performance. I called Bob and talked this over with him, and he convinced me it was the way to go. Accordingly, we called Terrill, found that they had '41-'52 pistons and rings in the required size, and ordered them. The pistons come pinfitted, and cost \$240 per set. Rings were an additional \$55.

**CAUTION.** Do not use '38-'40 pistons with a '37 head; the "wedge" is too big. There is nothing to be gained by using the '41-'52 pistons with a '38 head, and compression ratio will actually be decreased unless the head is milled.

The modern Fel-Pro head gasket (No. HS-7549B-3 (40) or HS 7612B (60, 80, 90)) works well with this conversion. Just to be sure, Ed put a blob of modelling clay in each cylinder after he had the engine together, put the head on, turned the engine over by hand, then removed the head. The shape assumed by the clay (which he saved and showed to me) indicated plenty of clearance. One should not use the thin pressed steel gaskets that may still be available as NOS parts.

Crank shaft; main and rod bearings. The crank was scored, and needed to be turned, but fortunately the damage was not bad. I had the ".030 under" rod bearings I'd bought from Bob Pipkin; Ed decided that ".010 under" would be enough for the mains and ordered that size from Terrill. (The "under" as here used refers to undersizing of the crank journals, not the bearings.) The crank was turned at Central Ohio to accommodate the different sizing of the two sets of bearings. This was an interesting, tricky, and time-consuming job for the "boss" at Central Ohio, because each of the main bearing journals is a different diameter from the other four. The crank was turned so as to achieve .002 clearance for all bearings. (Central Ohio probably hadn't had a 42-inch-long, 120-pound crank to work with in a long time, if ever.)

Timing gears, chain and cover. Installing the gears is a straight forward operation. It is possible, however, that a new chain may not have the "marks" that the originals had, and care must thus be taken to get the gears and chain in exactly the right position. The '37 chain cover has a "rope" seal where the end of the crank shaft passes through it. These were prone to leak; in fact, they were designed to leak a bit. The inboard flange of the harmonic balancer has a spiral groove machined into it; this was designed to take a small amount of oil out past the rope seal, which oil would then be thrown back against the seal by the rotation of the balancer. The idea was to keep the rope oily and prevent it from cracking; unfortunately, it worked too well and kept the whole front of the engine and oil pan nice and oily. Sometimes worse than that. The '49-'52 large engine cover I used eliminates this problem. When using this cover, however, you should sleeve the inboard flange of the harmonic balancer to eliminate the spiral groove. A new oil seal and sleeve are easily available. Ed uses these:

Seal - Victor 47688

Sleeve - Victor 99205 RS

(40-series engines may need different parts.)

Camshaft and cam bearings. The cam bearings purchased from Terrill were correctly sized to the standard dimensions and no line-boring was needed. The journals on the replacement cam were checked and found to be within the specified tolerance, but some of the lobes had been worn a bit out of profile. Central Ohio installed the bearings into the block. The camshaft was given to Columbus Col-Weld to "grind". In this operation, which requires specialized equipment, an amount of metal is taken off each lobe so that the original "profile" or shape is restored to each lobe and each lobe is the same size as its mate. (Lobes that operate intake valves may have a different profile than those that operate exhaust valves.) At the end, each lobe is a bit smaller than it was before, and therefore the "lift" provided to the valve lifters and push rods a bit less, but in most cases this can be compensated for in valve adjustment. In an engine with solid lifters, if you must take more off the cam and/or lifters than can be thus compensated, you need to replace the cam, the lifters, the push rods, or some of them. Ed was careful to instruct Columbus Col-Weld not to use the profile for the hydraulic-lifter or Dyna flow engine: this is significantly different from the profile for the solid-lifter pre-Dyna flow engine.

Valves and lifters. There is not much to say here that you have not heard before, except this: both Ed and I were wary of reconditioning lifters. Plainly, lifters are made from hardened steel, but we don't know how far into the body of the lifter the hardness extends. It may be — and here I emphasize "may" — that if too much is ground off a spalled lifter, the hardened surface may be destroyed, leading to premature wear and early failure after the lifter is returned to service. Thus I was extremely pleased to obtain good ones that required no resurfacing, and that I did not have to go to the trouble of running hardness tests. (The lifters retained from the old set were good enough to use as they were.) I do not know how much can safely be ground off a lifter; if any member has an opinion on this and can back it up with reasonable evidence or proof, I would like to hear it. The valves were, in final adjustment, left a shade loose, and there is a bit of clatter, but Ed felt this was better than too tight. Once she's run two or three thousand miles, perhaps next summer, we'll adjust them again.

Oil filter. I decided to add one. That screen on the oil pump float doesn't look like it could keep anything but rocks out of the pump. I visited Dave Lewis last summer and asked if I could pull the oil filter can out of one of his parts cars. "Help yourself," said Dave. I don't remember the parts car very well. Dave thinks it was a '41 and I think it was a '48, but in any event I seem to have gotten a '49-'52 (and some '48 70-series Dyna flow) filter can. This mounts on the push rod cover, and that is where we put

it on my engine, right above the starter. (That is where '36 oil filters were located, and one can assume that, when they were installed as optional extras on '37s, the location would have been the same.) I had a problem finding refill elements for the filter. Thinking I had a '48 filter, I bought a few elements for that (AC P-115) but found they did not fit. I then decided I must have the late-production odd-ball 70-series '48 filter that takes an AC P-127 element. However, I found that the AC P-127 has been discontinued, and I could not "cross" that number in WIX or Fram parts lists. Eventually I discovered that a Baldwin P-26 element will work and that Bob's Automobilia sells these. I ordered several but found that the gaskets that came with them were the wrong size. The correct gasket for these filters (4 13/32" diameter) is a WIX 15086 or Car Quest 90086; thanks to my friend the counter-man, I acquired a dozen gaskets, which should last me a while. I believe a WIX 51126 element will interchange with the Baldwin P-26. The filter can was connected to the oil gallery on the side of the engine; tapped holes with plugs in them were already in place for this, and copper tubing was used, which looks nice. The can and mounting bracket were painted gloss black, and a repro AC "Kleer Klean" decal put on. The whole installation looks like it came with the car originally, especially since it already had the optional heavy-duty oil-bath air cleaner.

Connecting rods. These were cleaned and checked by Central Ohio and trued up where necessary. Notwithstanding that the '49 Roadmaster they came out of probably had a lot of miles on it, the rods were basically in good shape. As indicated in a number of previous articles, the virtue of the '49-'52 rods is that they take insert-type bearings, and one can forget about poured babbitt-metal bearings and the difficulties that go with them. (There was nothing inherently wrong with babbitt-metal bearings, and they went many miles in many cars. However, it is hard to find someone who can re-babbitt rods today, and the insert bearings are more durable and easier to install.) If I had not found the '49 rods I would have had my old ones machined to accept modern insert bearings.

Balancing. In my opinion, balancing is essential when a rebuild job such as this is done. Years ago, if a shop ordered new pistons and rods from Buick, they got a "matched" set, wherein the weight of each piston and rod combination was equal to the weight of every other piston and rod combination, or at least extremely close. That cannot be achieved today, when we must use what we can get. The combination of the new Terrill pistons — which, let us face it, were likely not made with the same precision as the original Buick factory product — and the '49 rods, which had to be matched to the pistons more-or-less at random, created a potential problem of imbalance. Central Ohio sent the whole assembly of pistons, rods, crank, balancer and flywheel out to a shop that specializes in balancing. Ed and I were amazed at what came back: a lot of metal had been added here and taken away there. If the balance job had not been done, the engine would never have run smoothly, no matter how skillfully rebuilt.

Initial break-in. Ed ran my engine before the radiator and "front clip" were put back on the car. He attached it to a "shop" radiator mounted on a frame which was bolted to the front of the car frame. Thus, if any serious problems had appeared — fortunately none did — requiring the engine to be disassembled again, its removal would have been relatively easy. Moreover, any gunk left in the water jackets from the rebuilding operation that might deposit in a radiator was expelled into the portable "shop" radiator. The engine was run as soon as possible after it was finished, and thereafter for 15 or 20 minutes every day or two for several days. Ed "goosed it up" a few times during each running session. His advice is this: run the engine at varying RPM; don't let it overheat or run wide open for more than a minute or two during each session, but don't baby it; run it as soon as it's done, and keep running it as often as you can.



Some people warned me that I would have trouble starting the engine with the increased compression resulting from the later-year pistons. In fact, for the first few hundred miles, the engine would not turn over when hot. On the two or three occasions when this presented a problem, I was able to connect the starter to a 12-volt battery, and that did the trick. Ed then substituted a '51 Buick solenoid, which he happened to have, and that helped. At present, with approximately 900 miles on the engine, it turns over adequately, if not vigorously, hot or cold. This seems to me to be largely a function of the notoriously wimpy Buick starter. During the winter I will pull the starter and have it rebuilt with high-torque windings, and I would recommend that anyone rebuilding an engine have this done in any event. If I had been smarter I would have done it when the engine was out of the car.

I have also not been able to get the engine to idle very smoothly. I believe this is largely a function of my Stromberg AA-2 carburetor, or perhaps all Stromberg AA-2 carburetors. Ed did find a slight vacuum leak in the carb, which he corrected, and that helped. The Stromberg also tended to flood when the engine was shut down. That was helped by substituting a Grose-Jet ball valve for the original needle-and-seat. (See Vol. VIII, No. 3, p. 27.) However, the mixture is too rich, and attempts to correct that have failed. This particular carb has been rebuilt twice, and I think it may just be worn out, although several knowledgeable people have opined that the Stromberg AA and AAV are mediocre under the best of circumstances.

Some time ago, I bought (also from Bob Pipkin) an unrestored Carter WCD, apparently from a '50 large engine. At one point I intended to rehabilitate the Carter and put it on the '37, but decided for the sake of authenticity to stick with the Stromberg and see how it performed on the rebuilt engine. As an experiment, Ed put the Carter on the engine, and found that it idled smoothly at 400 RPM. If the Carter will do that in unrestored condition, we decided, it will surely be a marked improvement when rebuilt. Accordingly, the Carter will be restored and put on the car, and authenticity be damned. This will require modification of the choke heat riser and the throttle linkage, but that does not appear to be outside the scope of reasonable feasibility. I believe we will be able to do this and still retain the operation of the manifold-mounted '37 starter switch. The usual eye-catching giveaway that a '37 has the wrong carburetor is a missing or deactivated starter switch. (On '38 and later models, the switch is mounted on the carb.) With the manifold-mounted switch still in operation, none but the very sharp-eyed will know that I too have joined the ranks of carb-switchers.



How did all of this come out? Leaving aside the wimpy starter and a few minor carburetion and electrical problems that will be attended to later (and a failed fuel pump), after about 900 miles of driving under various conditions and at various speeds from 10 to 70 MPH, I would say, so far at least: GREAT! The Roadmaster is an entirely different car from what it was. The added horsepower and torque resulting from the

piston conversion are noticeable, and the car cruises happily at 60 with plenty of power left. In fact, I must continually resist the urge to go faster, bearing in mind not only speed limits but also the inherent limitations of my brakes, steering gear, and suspension. I had hoped to put about 2000 miles on the engine before putting the car away for the winter. This was too optimistic, but I may get to 1200 or so, and that is probably enough for an adequate if not thorough break-in. Discounting oil pumped into the intake manifold by a busted vacuum booster, the engine has probably used about a quart and a half of oil in the 900 miles. I expect oil consumption to drop considerably once the rings are fully seated, but that will probably not occur for another 1000 miles or so.

I will close this narrative with an important observation. If you want a "show car" that you will drive in and out of an enclosed trailer and no more, it doesn't make a hell of a lot of difference how well your engine runs as long as it runs. Most of us don't want that, and most of us feel, as I do, that a large part of the fun is in the driving, in the recapturing of the character of the great cars of the past and the experience of piloting them. If that is your goal, I suggest the following two precepts.

(1) There is nothing wrong with making some modifications that make the car more reliable, safer, and more adaptable to modern conditions, provided (a) they do not alter the character of the car significantly, and (b) they are reasonably reversible. What is a "significant alteration" and what is "reasonably reversible" are questions upon which we may differ among ourselves. I would contend that '49 pistons and rods are permissible under my standard, but not all might agree, and we will save a lengthier discourse on this subject for another day.

(2) Do not restore your car backwards. To illustrate what I mean, I will digress into electric power generation. Once a generating unit is completed, the main shaft of the turbine is never allowed to stop turning for more than a brief period of time. If it sits, it will warp ever so slightly, and when run again will vibrate itself into premature failure. When a unit is taken out of service, the shaft is rotated at two or three RPM by a turning gear powered by an electric motor. As it is with turbines, so Ed and I believe it is with automobile engines. When restoring a car, most people rebuild the engine first and then go on to the rest. Frequently years elapse until the car is ready to drive. Don't do the engine first; do it last. If a rebuilt engine sits for months or years without being run, it will never again run the way it should, and its life may well be significantly shortened. However well lubricated, it will start to seize and all the moving parts will begin to take a "set" in the position they are in; that is, things will warp ever so slightly, just as the turbine shaft will warp. When your engine is finished, as soon as your last plug wire is attached, start it up and run it, run it, and RUN IT. If you can roll it 1000 miles the first month, do it. Vary your speeds, but don't be afraid to push it after you've logged a hundred miles or so.

Although it cost me thousands of dollars, the terrible performance by the former rebuilder was, I now firmly believe, a blessing: it enabled me to get where, from the first, I wanted to be.





# TECHNICAL TIPS



## MORE ON BRAKE TROUBLE

In this last issue we saw how David Bylsma got over some master cylinder difficulties. Some time ago, my car suddenly began to pull to one side when the brakes were applied. The cause of this proved elusive, and might still be undetermined had we not pulled the engine out of the car to rebuild it. The usual brake checks revealed no obvious cause. One drum was slightly scored and was cleaned up, but that made no difference. When Ed Hunkins, my engine rebuilder, took the engine and steering column out of the car, he removed the front floor. On a '37 80 or 90 series car, this is a wood structure held in place by bolts. After this had been done, he noticed, more by accident than anything else, that the steel line to the right front brake was crimped in one spot. The line had been routed very close to one of the bolts that hold the front floor in place. Apparently, the bolt had moved enough to crimp the brake line. The body structure of any car will flex to some extent, and this flexing may well be greater than average in the '37 80 and 90 series cars, which have wood-framed bodies. If the brake line is routed between one of the floor bolts and the frame, even slight movement of the bolt may be enough to crimp the line, restricting movement of fluid through it. The cure was to make a new brake line and change the routing to avoid any possible interference. Once this was done the trouble vanished. I recalled that the trouble began after I had driven through a series of small hills and curves, which probably resulted in the body-flexing that did the damage.

## SAFETY

We've all heard many times about jack stands, gasoline, eye protection and several other aspects of safety. Here's something that I don't recall seeing in print before. I decided that, modern traffic being what it is, I needed to add directional signals to my '37. Having observed some old cars with directionals worked into the existing lighting, I also decided that the tail lamps and front fender lamps on a '37 (or '38 either) are simply not big enough and bright enough to get the attention of your average driver, who's used to the big 12-volt lights on modern cars. Therefore, I added separate lamp to my car, and authenticity be damned. To do this, I made up some brackets out of galvanized mild steel bar stock, to attach the lamps to the front and rear bumpers. I had to drill some fairly large holes (1/2-inch) in these brackets, and all that drilling created piles of little steel chips. I was wearing loose, light-weight shoes at the time, and later found that some of these chips had fallen on my feet, and worked their way into my shoes, through my socks, and into my feet. Ouch! It was no fun pulling these sharp little steel shards out of the soles of my feet. (I managed to get a couple into my fingers as well.) The lesson here is, if you drill holes in metal: (a) wear work shoes; (b) make sure you know where the chips are going; (c) dispose of the chips as you make them, into a shop-vac or some other safe containers; (d) don't try brushing them off the vise with your hand. It is also worthwhile to check the soles of your shoes before you go back into the house, to be sure you're not tracking those little bits of steel into the carpet, where they will embed themselves and spring out at the first person to walk

around barefoot. I need hardly add here, but will do so anyway, that it is far worse to have a steel shard in your eye than in the sole of your foot. Don't assume that the chips won't fly up toward your face: they can and they have. Always wear eye protection when drilling metal.

## DIRECTIONAL SIGNALS

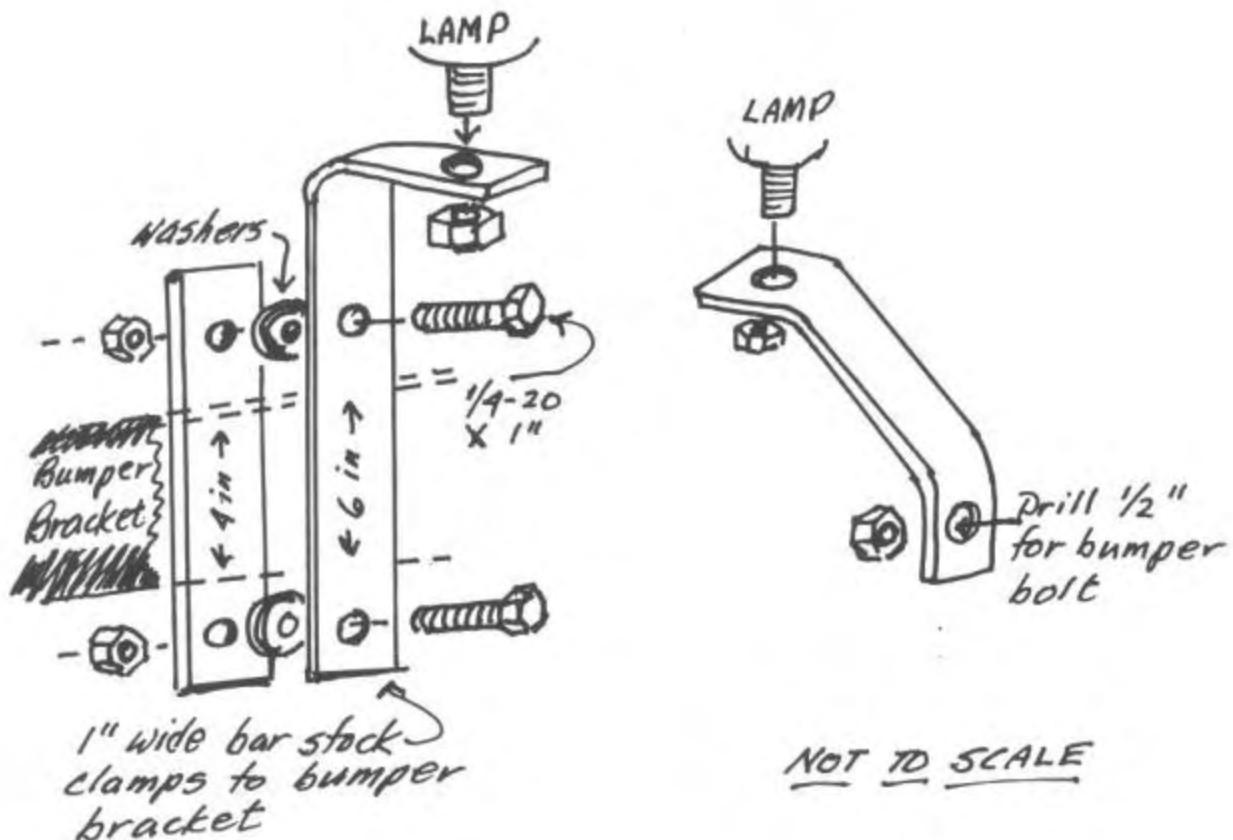
As indicated in a preceding entry, I decided the time had come to add directional signals to my car. Although the fender and tail lamps appear to have been wired by a former owner to accept a signal conversion, it seemed to me that these existing lights are too small to be easily noticed by the modern driver, who is used to tail lights that spread across half the width of a car. I therefore determined to add two larger lamps in front and rear.

I used modern plastic-bodied "trailer" or "pedestal" lamps and painted the bodies blue to match the car. Admittedly, these lamps are slightly jarring to the eye, but they were relatively inexpensive and are big enough to be seen. Each came with a socket for a double-filament bulb, and I simply joined the two wires together and used the same six-volt bulbs (1154) that are used in the original tail lights. Thus, when the signals are in use both filaments in the bulbs are energized and brightness is maximized.

Eventually I will replace the plastic-bodied lamps with something a bit more "period"-looking. One possibility is motorcycle turn signal lamps, which have nice chrome housings. (This of course requires screwing up one's courage enough to enter a motorcycle store.) Another intriguing possibility is to use my existing vintage Lorraine fog lamps. These have big single-filament six-volt bulbs (1007). By converting to double-filament sockets, easily done with modern parts, double filament headlight bulbs (2330) could be used in the fog lamps, and they could serve both as turn signals and auxilliary lights. That would leave only the rear for added lights.

The trickiest part of all this was to figure out how to attach the lamps to the car in a manner that would require no alteration of stock components. For the rear, I made up out of galvanized bar stock two brackets that can be clamped on the car's bumper brackets. The front presented more of a problem, because there the bumper brackets were already full with fog lamp and license plate attachments. So, for the front I made two simple brackets that are attached to the bumper bolts. Either style of bracket could be used on both front and rear, depending on individual requirements. I prefer attachment to the bumper bracket, because the lamps can be located farther inboard, minimizing the possibility of accidental damage. Sketches of the two bracket styles are shown below. The lamps were wired with bayonet-type connectors located under the car. These can be disconnected easily if I want to remove the lamps for a show.

If you wish to use the existing fender and tail lamps for directional signals, some steps can be taken for improved visibility. (These are not a bad idea in any event.) The tail lamps have no real reflective backing surface. Eastwood sells a lamp repair kit for roughly \$15 that contains a spray can of highly-reflective paint. Paint the inside of the housing with this. According to Tony Weiss (#647) the front fender lamps can be modified to accept a six-candle power bulb (81) instead of the original one-and-one-half candle power bulb (55). This is done by replacing the lamp base with a GM back-up light socket assembly that fits a 1 1/8" hole. (E.g., Calterm stock no. PS-41 or PS-42.)



#### TIRE SIZES VS. SPEEDS

One of the factors affecting "comfortable" cruising speed that is frequently overlooked is tire size. According to the graph comparing car speed in MPH and engine RPM that appears on page 82 of the 1937 Shop Manual, a 40-series car is turning 3679 RPM at 70 MPH and a 90-series car 3579 RPM. As the 90-series has an even lower axle ratio than the 40-series (4.625 vs. 4.44) it may be wondered how this can be. The answer is that the 90-series has considerably bigger tires, and the bigger tire takes fewer revolutions to go a given distance. Here is a chart of the outside diameters of the four tire sizes used on each of the four series, taken from the Coker Tire Co. catalog pages for Goodrich Silvertown reproductions.

Series	Tire Size	Outside Diameter
40	6.50 x 16	29.26
60	7.00 x 15	29.18
80	7.00 x 16	30.6
90	7.50 x 16	31.45

It will be observed that the 7.00 x 15 and the 6.50 x 16 have virtually identical outside diameters, but that when one moves up to the 7.00 x 16, outside diameter increases by almost an inch and a half. This is one reason why an 80-series car will typically cruise much more comfortably at 60-65 MPH than a 40-series car, even though the

80 has a 4.22 axle ratio. The Century is of course the best "cruiser" with its 3.9 ratio, but the Roadmaster is not far behind: 70 MPH in the Century equals 3234 RPM and in the Roadmaster 3379; compare these with the numbers given above for the Special and Limited. Fifteen-inch wheels were put on the Century for looks, not performance: one could put 16-inch wheels and 6.50 x 16 tires on a Century and performance would be the same.

### TIRE TREAD DESIGN

Speaking of tires, a 1937 Dealer Service Bulletin (page 57 in compilation BPS 2.81) states that there were two "approved" tire tread designs for 1937 production, and that use of tires with other tread designs might cause "undesirable riding, handling, or balance characteristics". One of the approved tread designs appears to be that used on Goodrich Silvertown tires. Neither of them correspond with the tread design on the commonly-used Firestone reproduction, the Goodyear reproduction, or on Denmans. The Goodrich reproduction is available in sizes for all '37 and '38 series from Coker. The Goodyear reproduction is, I believe, available only in 6.50 x 16. In my opinion, Denmans, although they look nice, should be avoided if you are intent on driving your car to any extent, as they are lacking in "grip" compared to the others. Whether there would be any noticeable difference between Goodrich and Firestone under actual driving conditions I cannot say, and I am not going to take the Firestones off my car and substitute a set of Goodrich tires (at about \$100 a piece) to find out. However, if you will be purchasing new tires in the future you may wish to take this into account.



APPROVED TREAD DESIGNS  
FOR 1937 PRODUCTION





# Classified Ads



## PARTS FOR SALE

1938 Parts: right side splash pan (40)-\$30; set of splash pans (40)-\$60; water pump NOS (40)-\$65; windshield wiper motor, like new (40, 60)-\$65; bumper guards, rechromed-\$25 to \$45 each; plastic repro parking light lenses-\$20 set; master cylinder, like new (40, 60)-\$60; hydraulic lifter cam, push rods, lifters & rebuilt rocker arm assembly (60, 80, 90)-\$250; set of 8 rods & bearings to fit 60, 80, 90, machined to take insert bearings-\$175 set; new standard size rings (60, 80, 90)- \$40 set; new standard size insert rod bearings (60, 80, 90)- \$40 set; Feb. 1938 TIME magazine with Buick ad-\$20; gatefold color brochure showing all models-\$65; windshield washer accessory kit NOS with instructions, hoses, extra fluid bottle-\$95. All prices plus shipping. Call between 5:30 PM & 9:30 PM EDT Mon.-Fri., any time Sat. & Sun. DAVID BYLSMA (117). 7802 Chevalier Ct., Severn, MD 21144. 301/551-7236

NOS water pump for large engine-\$50; 1937 tread cover with chrome & backpieces, 6 1/8" wide-\$50; two 15" wheels, poor condition-\$10 each; 1937 coupe model 46, no engine, transmission-\$200. All prices plus shipping. GLEN BORCHARDT (#701). 824-19th St., Windom, MN 56101. 507/831-2480.

1937 series 40 engine, transmission, drive train, front end, rear shocks, from street rod project. DAN VAIL, 14365 Dolphin, Detroit, MI 48223. 313/537-3687.

1938 front & rear bumpers-\$40 each; 1938 ash trays, dash-\$8 each; 1937-38 NORS factory rebuilt front shocks-\$125 pair; 1937-39 NOS Delco front shocks (original box)-\$165 pair; 1938 sales catalog, color, exc.-\$70; 1938 self-shifting transmission (rare)-\$35. All plus 10% shipping. JERRY LANDRY (#263). 34 Goodhue Ave., Chicopee, MA 01020. 413/592-5088.

Original Buick Owner Service Policy issued June 9, 1937 by Foley Motor Sales, Wilmette, IL covering vehicle with Serial # 3175417. Good condition with 1000 & 2000 mile inspection coupons still attached. \$15 postpaid. BILL OLSON (#427). 842 Mission Hills Lane, Columbus, OH 43235. 614/436-7579.

## PARTS WANTED

1937-1938 Special coupe: gas tank, window cranking mechanism including handles, running board stainless molding, sidemount molding ring, heater & defroster. TED TAYLOR (#792). 3313 S. 298th, Auburn, WA 98001. 206/946-5080.

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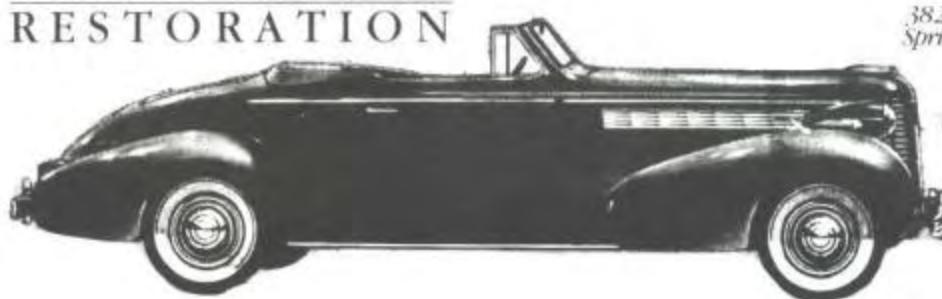
Roy Salmons (#912)  
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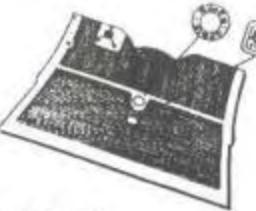
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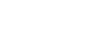
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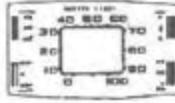
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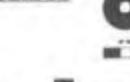
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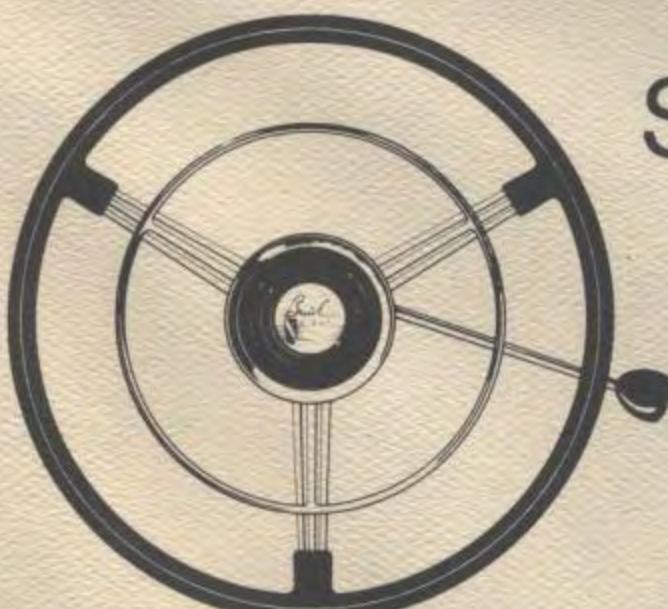
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